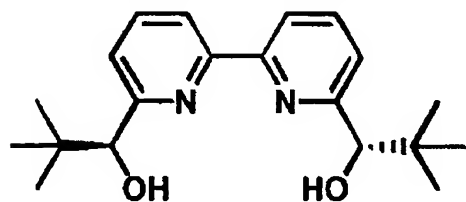


Abstract

The present invention presents a catalyst that allows asymmetric hydroxymethylation reactions to progress with excellent asymmetric selectivity and a production method for optically active hydroxymethylated compounds using the catalyst. Optically active hydroxymethylated compounds are obtained with excellent asymmetric selectivity by using a catalyst obtained by mixing chiral ligands (for example, chemical formula 4)



with scandium triflate and the like.